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LAW OFFICES
AMIN & TUROCY, LLP
24TH FLOOR, NATIONAL CITY CENTER
1900 EAST NINTH STREET
CLEVELAND, OHIO 44114
TELEPHONE: 216-696-8730
FACSIMILE: 216-696-8731
EMAIL: BSTEED@THEPATENTATTORNEYS.COM

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Date: April 8, 2008

TO: Melissa J. Berman – U.S. Patent and Trademark Office

FAX NO.: 571-270-2393

FROM: Brian Steed

In re patent application of:

Applicant(s): Bo Thiesson, *et al.*

Examiner: Melissa J. Berman

Serial No: 10/628,546

Art Unit: 2129

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Title: DYNAMIC STANDARDIZATION FOR SCORING LINEAR REGRESSIONS
IN DECISION TREES

TOTAL NUMBER OF PAGES (INCLUDING THIS PAGE): 5

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Dear Examiner Berman:

Thank you for your time and effort with regard to the present application. Pursuant to our telephonic discussion conducted on April 7, 2008, please find attached a proposed set of amended independent claims. These amendments incorporate suggestions made during our discussion that you indicated may address your concerns in connection with the outstanding rejections 35 U.S.C §101.

Should you find these amendments to overcome the outstanding rejections under 35 U.S.C. §101 related to these claims, you are authorized by us to enter these amendments as an Examiner's amendment in order to expedite allowance of the present application.

If you have any questions or other concerns regarding these amendments, please feel free to call me through the number given below. Alternatively, if you feel a telephonic discussion is necessary to review these amendments, please contact us with a preferred date and time, and we will make ourselves available.

Thank you again for your time and consideration. They are much appreciated.

Best regards,

-Brian Steed and Nilesh Amin
Amin, Turocy, and Calvin, LLP
24th Floor, National City Center
1900 E. 9th Street
Cleveland, OH 44114
216-696-8730
216-696-8731 (Facsimile)

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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system embodied on a computer-readable storage medium that facilitates decision tree learning, comprising:
 - a learning component that generates non-standardized data having a non-zero mean that relates to a split in a decision tree, the non-standardized data related to a statistical model that produced the decision tree; and
 - a scoring component that assigns a score to the split as if the non-standardized data at a subset of leaves of the decision tree had been at least one of shifted or scaled, the non-standardized data is at least one of virtually shifted through omission of a matrix operation or virtually scaled through modification of a subset of elements relating to a covariance matrix, the score is at least one of stored on a computer readable storage medium, displayed on a display device, employed by one or more processes executing on one or more processors, or transmitted between two or more processes executing on one or more processors employed to evaluate the performance of the statistical model for a data mining application that evaluates personal data.

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11. (Currently Amended) A system embodied on a computer-readable storage medium that facilitates data mining, comprising:

means for automatically generating a set of non-standardized data for a statistical model associated with a set or subset of data relating to a continuous variable, the non-standardized data associated with a split in a decision tree and having a non-zero mean; and

means for automatically assigning a score to the split as if the non-standardized data were at least one of shifted or scaled, the non-standardized data is at least one of virtually shifted by omitting a matrix operation from automatically scoring the split or virtually scaled by modifying a subset of elements relating to a covariance matrix, the score is ~~at least one of stored on a computer readable storage medium, displayed on a display device, employed by one or more processes executing on one or more processors, or transmitted between two or more processes executing on one or more processors employed to evaluate the performance of the statistical model that produced the decision tree for a data mining application that evaluates personal data.~~

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14. (Currently Amended) A computer-implemented method that facilitates decision tree learning, comprising:

determining whether to perform a virtual shifting operation on a non-standardized set of data with a non-zero mean associated with leaves of a decision tree, the non-standardized data related to a statistical model that produced the decision tree;

determining whether to perform a virtual scaling operation on the non-standardized set of data; and

automatically assigning scores to the leaves based in part upon the determinations of whether to perform the virtual shifting and virtual scaling operations, the virtual shifting operation includes omitting a matrix operation from the assignment of scores and the virtual scaling operation includes modifying a subset of elements relating to a covariance matrix, the scores are at least one of stored on a computer-readable storage medium, displayed on a display device, employed by one or more processes executing on one or more processors, or transmitted between two or more processes executing on one or more processors employed to evaluate the performance of the statistical model for a data mining application that evaluates personal data.

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21. (Currently Amended) A computer readable storage medium that includes a tangible component that has a data structure stored thereon, comprising:

a first set of data fields describing a non-standardized set or subset of data having a non-zero mean relating to a continuous variable, the non-standardized data related to a statistical model;

a second set of data fields describing a decision tree and associated branches, the decision tree produced by the statistical model; and

a third set of data fields describing a score for the branches, the score computed for the branches as if the non-standardized set or subset of data had been shifted or scaled, the non-standardized set or subset is at least one of virtually shifted by omission of a matrix operation from the computed score or virtually scaled by modification of a subset of elements relating to a covariance matrix, the score is at least one of stored on a computer readable storage medium, displayed on a display device, employed by one or more processes executing on one or more processors, or transmitted between two or more processes executing on one or more processors employed to evaluate the performance of the statistical model for a data mining application that evaluates personal data.